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THE FARMERS' CABINET,

DEVOTED TO AGRICULTURE, HORTICULTURE AND RURAL ECONOMY.

Vol. II.—No. 11.] Philadelphia, January 1, 1838. [Whole No. 35.

For the Farmers' Cabinet.

Horned Cattle.—No 1.

There happily appears to be an increasing disposition amongst the farmers of eastern Pennsylvania, to improve their stock of cattle by the introduction of English Short Horned and other improved breeds; and by raising more frequently and with greater care than formerly from their own stock, rather than depend on purchasing from droves to replenish their farm yards. This spirit was clearly manifested at the recent sale of imported short horn Durhams by the celebrated breeder, Mr. Whitaker, of England. Out of thirty-five cattle then disposed of, sixteen were purchased by farmers in this section of the state. Believing that something may be contributed in aid of this laudable spirit, by throwing together such notes as I have collected in an excursive perusal of the subject, together with such remarks and reflections as some experience and observation have enabled me to make, I shall ask the favor of your valuable pages for their communication to the public.

For the best and most highly approved kinds of cattle we must look to England, that country having taken the lead of all others in raising and improving stock. They have several varieties, each of which has its advocates; the most noted are the Durhams, Devons, Herefords, Ayreshires and Alderneys, each kind having peculiar advantages. For milk alone, perhaps the best Ayreshire and Alderney cows are not surpassed, and as working cattle, the Herefords and Devons excel; but for the combined advantage of milching and fattening freely, I am convinced that the improved short horns are unequalled, and fully believe them well adapted to the extensive ranges of pasture lands which our middle and western states afford. Some people are prejudiced against this breed under the supposition that they are too delicate for our rough climate and will necessarily degenerate. This I am assured is a mistaken opinion; an inference founded on false premises. They have within a few years been rapidly spreading over the northern counties of England and the Lowlands of Scotland even to the very borders of the mountain districts, and the climate there, is, during the winter, quite as severe as with us, if not more so.

I fully and freely admit that they require care and attention, plenty of good feed and kind treatment, but these are requisite with every class of animals where improvement is wished, or a high state of perfection to be maintained. How far are these essential points studied by our farmers? This is a question which every man who undertakes the raising of stock should ask himself, and I am sorry to say that in many, very many cases, the answer would expose great deficiency, and clearly show the reason of so many animals being scrubby, half starved and unprofitable.

It is a prevailing, almost a universal fault with our Pennsylvania farmers in this vicinity, to stock too largely, and when we have a dry autumn, an event that frequently occurs, their fields are pastured bare, leaving nothing to protect the tender roots of the grass from the severe frosts of winter. The cattle too are stinted in food, exposed without shelter day and night until we are almost in mid-winter, and thus instead of entering on this hard and trying season in good order, they are half starved and more than half perished; their milk is dried up and their offspring consequently stunted! Nay, more, the constant anxiety to keep a large number, leads to the consumption of the food so rapidly that before

spring the poor beasts are put upon still shorter allowance, and as soon as the snow disappears, are turned out to pick up what they can, and crop down the grass so early as to injure, and greatly diminish the source of supply for the ensuing season.

But I will not exhaust your patience by dwelling longer on the very erroneous practice of our stock farmers, and dairy men most particularly. Any of them who may take the trouble to reflect, and observe, must admit that half famished cattle, exposed to cold and wet weather, cannot thrive, and must be less profitable than if well fed and housed.

A Penn Township Farmer.

For the Farmers' Cabinet.

Curing Hams.

It is said that in a multitude of counsel there is wisdom. Many receipts have been given how to cure hams. The following is my method.—It is plain, simple, and easy to follow. For every ham,* shoulder, or jowel, I take as many handsfull of fine salt, and as many large tea-spoonfuls of pulverized saltpetre; this is put into a tub and well mixed together; then pour in as much molasses as will give it the appearance of good brown sugar. With one hand full of this mixture rub each piece of meat on both sides, and then pack them down in a cask: if any mixture remains pour it on the meat. Let them remain fifteen or eighteen days. Then take equal proportions of strong ley and pickle that will float an egg or a potatoe, pour it into the cask until your meat is covered; place a weight on to prevent it from rising, and let it remain fifteen or eighteen days; then take it out and let it drain for several days. Hams and shoulders should be hung with the hock downwards. A frame smoke house is much superior to either brick or stone, for smoking meat. Green hickory or sugar maple makes the best smoke. Hams cured according to this receipt are very superior. Try it until you find a better, and then publish it.

J. B. C.

For the Farmers' Cabinet.

To make Currant Wine—Very Superior.

To every quart of currant juice, add three pounds of sugar, and water sufficient to make one gallon; let it remain in the tub all night, next morning remove carefully all the scum, then put it in the cask (preserving a small quantity to fill up as it ferments) which will require from six to eight days, then place the bung in slightly, for three or four days, then drive it well in, and let it remain.

Note.—The better the sugar the better the wine; I use broken down lump. Wine made after this receipt will keep many years and improve with time—if you have more wine than the receipt calls for, put it in—no brandy is required to give it a body, or to preserve it. I would recommend to every person that sends a receipt to the Farmers' Cabinet, for making wine, to send a bottle of wine and let the Editor be the judge of it.

J. B. C.

Dec. 14th, 1837.

☞ The above communication was accompanied by a bottle of domestic currant wine, of a very superior order, the very best we have tasted for several years; and our friends, some of whom are good judges, pronounce it excellent. The receipt is simple, and to all who are disposed to manufacture their own wine, we say, *try it.*

For the Farmers' Cabinet.

Remarks upon Agricultural Buildings. No. 2.

WINDMILL TO RAISE WATER.

Water may be raised by the power of wind (as a first mover) either by a Vertical or a Horizontal Wind-Mill.

When a vertical mill is used upon a pump tree already placed in a well, the tree itself forms the vertical fixed axle upon which the hollow Box turns which carries the axle of the wind-wheel round in a horizontal direction, to face the wind as it shifts or changes its course. The axle of the wind-wheel is formed into a crank and wrist to operate on the valve and bucket-rod so as to make a stroke, and cause a portion of water to be raised at each revolution of the wheel, the centre of the wrist being at all times over the centre of the opening or tube at the centre of the pump tree. One end of the horizontal axle carries the wind-wheel, and the other turns in and against the extremity of a horizontal cylindrical hole, formed in the hollow box, and another portion of the axle between the crank and wheel turns in a horizontal cylindrical hole formed by two semicircles, confined together by screwbolts. Both bearings of the shaft and also the wrist are of perfect horizontal cylindrical forms, and turn in corresponding holes; the two former in the box, and the latter in the rod, near the upper end of it. The cylindrical hole across the rod may be formed of two semicircles, confined together by screw bolts and nuts. The wrist and part of the crank are within the tube of

*Hams weighing from 12 to 15lbs.

the pump tree at each revolution, and are out of it at the other part of the revolution; the remainder of the axle between the crank and box revolve immediately above the pump tree.

The box also carries a vane placed at the opposite side from the wind-wheel, which serves to keep the wheel always facing the wind.

When the water is raised by the wind acting on the wind-wheel, with sufficient force to turn it, together with the axle, crank, and wrist, and thereby lower and raise the rod, bucket and valve of a lifting pump, the portion of water raised at each stroke runs out in the usual manner at the discharge pipe.

The different parts may be composed of any suitable substance, and the dimensions be such as the quantity of water in demand may require.

Where the opening or tube through the centre of the pump tree is not cylindrical, a compound motion may be communicated to the rod, while the bucket and valve do not partake of the same vertical and horizontal motion, but move simply in a vertical direction; this is effected by introducing a universal joint to connect the rod and bucket either in the usual form of a portion of a ball and socket, or in any other convenient manner. Another convenient mode is to place a pivot at the lower end of the pump tree, and three or more horizontal friction wheels, at or near the mouth of the well to preserve the tree in a vertical position, and at the same time allow it to turn freely in a horizontal direction by the force of the wind on the vane.

The wind-wheel, axle, crank, wrist, rod, &c. are formed in the manner already described, but the axle turns in the pump tree and a semicircular cap confined over the bearing of the axle, by screws; and the vane is attached to the pump tree at the opposite side from the wind-wheel. A circular or other trough or reservoir surrounds the pump tree and receives the water from the discharge pipe as it is raised in the pump by the wheel, crank, rod, bucket, valve, &c. as aforesaid.

Explanation of Fig 29., which is a *plan* or *horizontal projection* of the different parts of the vertical wind-mill, described above, except the wheel, which is supposed to be placed on the shaft at 3 3—and the vane which is supposed to be placed at 7 and attached to the hollow box 2 2, so as to extend a sufficient distance in the direction of the dotted line between 7 and 8. The wind-wheel extends a sufficient distance from the shaft or axle; the dotted lines between 9 9, show the direction of two of the radi; the others meet the shaft or axle at the same angle. The operation of the wind upon the vane 7 8 brings the wind-wheel 9 9 facing the wind. The

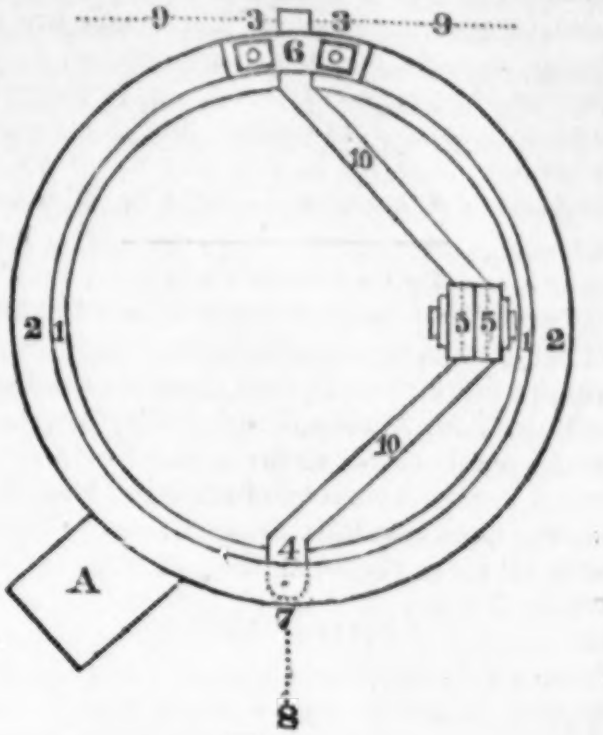

Fig. 29.

wind then turns the wind-wheel, and shaft or axle 3 3 4—crank 10 10, and wrist-which is in the position of the dotted lines near 5 5, but which is concealed from view by the upper end of the rod, 5 5 The dotted line between 4 and 7 represents the position of one end of the shaft or axle—1 1 represents the upper end of the pump tree, and A the discharge pipe. P.

Chester County, Pa., Dec'r. 5th, 1837.

N. B. I have described the vertical wind-mill *only* because that is generally considered the most powerful, and is suitable for the application of the crank to produce an alternating motion in the rod, bucket, and valve; but where desired, a vertical alternating motion may be given to them by a horizontal wind-mill, the vertical shaft of which turns in the vertical pump tree, and by means of a screw or inclined plane formed upon the periphery of said shaft, or upon a cylinder attached to the shaft or axle, to extend half way round the periphery, or other suitable distance; this forms what is sometimes called a broken screw, and is made to act on a projection formed on the valve and bucket-rod so as to raise them during part of the revolution of the shaft or axle, and they descend by means of their own weight during the other part of the revolution; when the screw or inclined plane or projection aforesaid are not in contact, or a groove may be made in a spiral form around one half or other portion of the periphery in one direction, and in a contrary direction around the other portion of the periphery, and the projection or cog upon the rod inserted into it; a revolution of the vertical axle or cylinder then causes the projection or cog and rod to which it is connected, together with the bucket and valve of a lifting pump

to lower and rise, a distance equal to the eccentricity of the groove. The sails are attached to arms, and are so constructed as to present the edges to the wind when facing or moving towards its course, and their sides when moving with it, and may move either on vertical or horizontal hinges or fulcrums.

For the Farmers' Cabinet.

Can Wheat be transformed in Cheat?

Mr. Featherstonhaugh contends that it *can*, and, in proof thereof, says, that M. Conway, of Rapid Ann, Madison county, Virginia, gave him a plant which, as far as the heads went, was a perfect specimen of *cheat* or *chess;* but having been carefully drawn from the field, with all its roots attached to it, without any visible fracture, and in the most natural manner, he saw the skin of the kernel of the seed from which the plant had proceeded, and that it was of *wheat*, and nothing else.* But Botanists say that this supposed transmutation of wheat into cheat is a natural impossibility and vulgar error.

Doctor Darlington,† under the head of Bromus,—rye bromus, vulgo,—cheat, chess, says, "This well known troublesome grass is a naturalized foreigner; and obstinately accompanies our crops of wheat and rye. Frequently when the wheat has been injured by the winter, or other cause, the bromus is very abundant; and many farmers are so little acquainted with the laws of nature—and therefore prone to absurd mistakes—that they imagine the wheat has been *transformed* into bromus or cheat."

It is a pity some of your intelligent readers who are *practical* farmers, dont endeavor to probe this matter to the bottom, and let us know the result. P. A. B.

To the Editor of the Farmers' Cabinet.

Blight in Pear Trees.

Dear Sir,—Amongst all the communications which I have noticed in your valuable paper on the subject of this disease, there is but one, which, in my opinion, approaches to an explanation of the true cause, by refering it to the gradual decay, and inevitable death, to which every vegetable, as well as animal, is doomed, and that grafts which are now admitted to be mere enlongated parts of the parent stock, inheriting all its qualities and infirmities, are sooner or later involved in the same fate.

In accordance with the opinion which is entertained by the most enlightened vegetable Physiologists, every existing variety of fruit tree must one day become extinct. In this view of the subject, experience, the great test of truth, will bear us out.

An attentive observer will discover evident works of declining vigor and incipient decay in all the older cultivated varieties of the pear; indicated by the yellowness of the bark, the sickly paleness and softness of the leaf, the brittle and spongy structure of the young shoots, contrasted with the more healthy appearance and condition of the same parts in the seedling, or those trees which have recently originated from seeds—(as for instance the Seckle pear.)

The appearances then which are called Blight, I consider to be the natural consequence of the sudden arrest of the sap, and would be produced by any cause suddenly extinguishing life—as it is always observed to follow the development of the leaves, and often after the fruit is nearly matured. The proximate cause of death may be very rationally ascribed to the expenditure of vital energy and exhaustion which follows these functions.

I do not contend that even seedlings may not suffer from blight; vegetables as well as animals being subject to premature death; but I do not insist that this result in the latter case is of comparatively rare occurrence.

The most delicious and beautiful pear I ever saw (the particular variety to which it belonged, I never could discover,) was introduced into Northumberland County, about forty years ago, and extensively cultivated; but which had become so sickly as to bear but once or at most twice, when exhaustion and death invariably followed.

This pear was so great a favorite with me that I preserved it alive by annual engrafting after it had become extinct elsewhere, and the last tree of this variety probably existing at the time, died in my garden a few years ago.

I have several other kinds in the same garden which give promise of a long life. They are engrafted upon seedling stock, having observed that a frequent case of death arises from the stock having been taken from the roots of old trees which were themselves the progeny of suckers for many generations back.

If we have not a remedy for that, (which I consider to be incurable,) we have an unfailing resource provided by a bountiful Providence, in the seeds, by which new, equally good, and hardy, varieties may be regenerated.

The length of time required to bring a seedling to maturity has deterred most cultivators in this country from making the experiment. To those who may be inclined to try it, I would suggest that the period may be very much abridged by ringing, so as to force out the fruit bearing buds at an early age, to ascertain the quality of the fruit.

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* See the Monthly Am. Jour. of Geology, &c. of June 1832. p. 561.

† Flora Cestrica, p. 60.

If scions from the bearing branches are then engrafted upon seedling stocks of a proper size they will bear fruit the fourth season, and if planted in a favourable soil will rival, I am convinced, in health and vigor, any other of our fruit trees.

You will perceive by the above remarks that I am not a competitor for the prize—at the same time you are at liberty to make of them what disposition you please.

Very respectfully your ob't,

Jos. HENDERSON.

Brown's Mills, Mifflin Co. Pa. Dec. 18, 1837

Note.—In justice to the gentleman, whose communication is referred to, I would have quoted his name could I have laid my hands upon the paper containing it.

OBSERVER, No. XIII.

ON WHITE-WASHING FRUIT TREES.

The opinion expressed by I. C. in the last Cabinet, respecting the white-washing of fruit trees, appears to deserve further examination. The practice may be too indiscriminately pursued by some of our Chester county farmers; yet, if they abuse, or empirically use, the application, such abuse, or misuse, of it will not justify the sweeping denunciation of I. C. He objects to the practice, because "it forms a coat over the trunk of the tree of a dry costive nature, which effectually prevents the humidity of the night air, and the futilizing dews, so indispensable to the expansion of the bark and the health of the tree, from penetrating, softening, and moistening the outer coat."

Now I do not know this to be the fact. I have not observed lime to form such a coat as I. C. describes. Nor do I know that the humidity of the night air, and fertilizing dew, are "indispensable" to the expansion of the bark, for, I have known trees to grow, and their bark to expand, in situations where those *indispensables* were, in a great measure, excluded. Admitting the truth of these positions, the evil would be of very short duration, according to I. C.'s own showing, for, says he, "another tendency, even more injurious than the former, is, that the coat of lime deadens the external bark, and, in the autumn, it peals off." "But, let it be remembered, and duly considered, that this very outer covering, taken off by the effects of the lime, is that which is intended, in the wisdom of the great Author of nature, to protect, or defend the tree, in this northern latitude, from the inclemency of a severe and protracted winter."

Here, again, I do not know the fact, because it has not fallen within my experience. The external cuticular layers of vegetable, like animal bodies, successively become dead, while new layers are continually forming underneath to supply their place. These dead layers may frequently exfoliate and fall off, as they are seen to do in the younger branches of the buttonwood, (platanus accidentalis,) or it may remain attached, but rent in fissures by the expansion of the wood, giving the tree a rugged and unseemly appearance, as in the oak. And I will appeal to I. C. himself, whether it will not hold true, both in the orchard and the forest, that if we take any two trees of the same species and age, those of the most healthful and vigorous growth, will present the smoothest and thinnest dead coat of cuticle. If our ordinary fruit trees become unhealthy from any cause, the cuticle ceases to exfoliate as it should, becomes more rough, and does not expand properly, the bark is covered with parasite plants, destructive insects find shelter among the crevices, and insectivorous birds in seeking for these, increase the injury. But, if this state of the bark results from an unhealthy condition of the tree, it becomes, in time, the cause of new diseases. The tree is *bark-bound;* it cannot thrive.

The existence of this state of things has been proved a thousand times, by splitting the outer bark of the trunk, from the branches to the ground, and allowing it to expand. By commencing the incision at the origin of an ill-thriven branch, I have seen the growth of that branch rendered seven-fold greater than any other on the tree.

Now, if I rightly apprehend the object of white-washing fruit trees, it is not, merely, to allow the incrusted bark to expand, but, to remove the incrustation—to cause the binding cuticle to exfoliate. At the same time, we obliterate the clefts in the bark, where moss and insects are disposed to collect, and escape the annoyance from birds seeking feed in those places. And, as a consequence, we "promote the health and thriftiness of the tree." If my experience does not deceive me, the use of white-wash does most happily effect these purposes. When these indications are fulfilled—when the bark becomes smooth, and the tree flourishing, the practice need not be continued, and might become injurious.

If, as I. C. asserts, a thick cuticular covering is intended in the wisdom of the great Author of nature, to protect the tree against the severity of our northern winters, why has he not provided for the beech and the maple, as well as for the oak? Or, why has he planted the cork tree (quercus suber) with its enormous thick coat, in the genial climate of the south of Europe, instead of the bleak mountains of the frigid zone?

Again; I. C. objects, that "whatever has a tendency to remove or take off, this cover-

ing, necessarily exposes the trunk of the tree more to the action of severe frosts, which not unfrequently, in extreme cold weather, proves fatal." If the trunk is endangered by this cause, how do the younger trees, and the tender branches escape? I would thank I. C. for authenticated facts to show that white-washed trees are more frequently destroyed in this way than others. I have not observed it to be so.

The bark on the trunk of fruit trees sometimes splits during intense frost. But, whether this is caused by the expansion of the wood, or the contraction of the bark, I conceive it more likely to happen where the bark is hard and unyielding, than where it is soft and pliable.

For these and other reasons, I cannot agree with I. C. that white-washing fruit trees "is not only labor lost, but, in reality, has a very deleterious effect on the vitality, growth, and well-being of the tree to which it is applied."

Young trees (fruit trees and others) which grow rapidly, and make much wood late in the season, are subject to *blister on the south side, just above the ground, when the frost is severe, and the ground covered with snow.* This was remarkably the case during the memorable snow and frost of 1831. In all the instances which I have observed, it occurred on the side of the *twelve to two o'clock sun, and below the surface of the snow.* It may, perhaps, be explained by considering that the sun melts the snow around the tree, leaving a vacant space where the combined energy of the direct and reflected heat of the sun's rays produces a considerable degree of warmth at noon-day, and leaves it fully exposed to the frost at night. The use of lime, by rendering the tree more thrifty, and the bark thin, may, perhaps, increase the liability to this accident.

New Garden, 12th mo., 18th, 1837.

Philadelphia, Dec. 20th, 1837.

To the Editor of the Farmers' Cabinet.

Dear Sir—By giving publicity to the following communications from Mr. Stonebraker, Col. Frisby Tilghman and others, which were first published in the Hagerstown Torch Light, describing the operations of my Reaping Machine, you will confer a favor on me, and convey, it is hoped, some useful information to the Farmers of Pennsylvania. As no other machine for reaping grain with horse power has ever been more perfect in its operations, it is presumed that a general interest will be felt by farmers, and others to become acquainted with its construction; for this purpose an engraving is now in course of preparation, which with a description of the machine will be in readiness for your next number.

The public are respectfully informed that machines for the next harvest will be manufactured under my superintendance in Easton, Talbot county, Maryland, where all orders will be attended to until further notice.

Obed Hussey.

Wheat Cutting Machine.

Mr. Bell:—Dear Sir: will you please give this a place in your paper, for the benefit of wheat growers. As the subject is of public interest it is hoped that other papers will circulate it through the grain growing districts of the country.

I procured a Reaping Machine this summer of Mr. Hussey, the inventor, which I have used through my wheat harvest. It was in constant use every day, and performed its work to my satisfaction, and far better than I had any expectation of when I first engaged it of Mr. Hussey. When the ground is clear of rocks, loose stones, stumps, &c. and the grain stands well, it cuts it perfectly clear, taking every head, and if well managed scatters none; but leaves it in neat heaps ready for binding. When the grain is flat down the machine will of course pass over it; but if it be leaning, or tangled only, it is cut nearly as well as if standing, excepting when it leans from the machine, and then if the horses are put in a trot it will be very well cut. But in cutting such grain much depends on the expertness of the hand, who pushes off the grain, in making clean work, and good sheaves. I found the machine capable of going through any thing growing on my wheat land, such as weeds and grass, no matter how thick.

After my harvest was over, I cut my seed timothy, with the same neatness, and ease that I did my grain. As respects the durability of the machine, I can say this much for my machine, that not the least thing has given out yet; it appears as strong as a cart, and but little liable to get out of order, if well used. I was advised by Mr. Hussey of the necessity of keeping some of the parts well greased; this I have punctually attended to, and no perceptible wear yet appears, beyond the ordinary wear of any other machinery.

It is immaterial to the machine whether the speed be a walk, or trot; although a walk will make the most perfect work. My speed was a common walk, but a trot is sometimes necessary to counteract the effect of a strong wind when blowing from behind, in order to incline the grain backwards, on to the platform, to make good bundles. A quick walk is required to make good work in very short and scattering grain. The machine performs well, up or down hill, provided, the surface be not too broken. By its compactness and ease of management, rocks and stumps, too high to be cut over, can be easily avoided. Although a rough surface is very objectionable, yet I have cut over very rocky ground with no material difficulty. I can say one thing which to some may appear incredible, but it is not the less true; the cutters

of my machine have not been sharpened since I have had it; nor have I yet seen any appearance of a need of it in the quality of its work. How many harvests a machine would cut without sharpening is hard to say. I propose sharpening mine once a year only. I have used two horses at a time in the machine, and sometimes changed at noon; they worked it with ease, the draught being light. I took no account of what I cut in any one day, with this exception; in less than half a day I cut six acres, and was often detained for want of the requisite number of binders; by which much time was lost. My machine being something narrower than those generally made by Mr. Hussey, I could cut but about one acre in going two miles, this at the moderate gait of two and a half miles per hour would amount to twelve and a half acres in ten hours, and at four miles per hour, a speed at which the work is done in a fine style, the amount would be *twenty* acres in ten hours. I should judge my quantity per day to range between ten and fifteen acres, yet I am decided in the opinion that I can cut twenty acres in a day, of good grain, on good ground, by the usual diligence of harvest hands, with a little increase of my usual speed, and a change of horses. Two hands are required to work the machine, a man to push off the grain and a boy to drive, besides a number of binders proportioned to the quantity cut. As the machine can be drawn equally fast in heavy or light grain, the number of binders is necessarily increased in heavy grain, except an additional speed be given in light grain. Under every circumstance the number of binders will vary from four to ten; and when the usual care is practiced by the binders there will be much less waste than in any other method of cutting.

I speak with more confidence of the merits and capacity of Mr. Hussey's reaping machine from the circumstance of having pushed the grain off myself for several days, in order to make myself practically, and thoroughly acquainted with it before putting it into the hands of my laboring men. The land in this county being rather rocky, and uneven, it is hard to say what may be the ultimate advantage of these machines to our farmers, but from what little experience I have had I am resolved not to be without one, or two of them, I can therefore recommend the machine with confidence, especially to those who have a large proportion of smooth ground in cultivation. It is undoubtedly a labor saving machine, and worthy of their attention. JOHN STONEBRAKER.

Hagerstown, August 15, 1837.

MR. HUSSEY—

Sir—Your Wheat Cutting Machine was used by me in securing my clover seed; with one man, three boys and two horses, we cut about twelve acres per day. The operation was in every respect complete—the clover was well cut, and deposited in proper sized heaps, and no raking required, further than to remove the heaps of cut clover from the track of the machine, the whole operation was easily performed by the hands and horses. In the operation of cutting wheat, I followed the machine for about two acres in the field of Mr. John Stonebraker, during the late harvest, and can vouch for the operation in securing his wheat in the manner described by him in his publication.

The late improvement made by you in your machine has added greatly to the beauty and facility of its operation.

Yours respectfully,

F. TILGHMAN.

Rockland, September 15, 1837.

We the subscribers certify, that we seen Mr. Hussey's wheat cutter in operation in the clover field of Col. Tilghman, and fully agree with him in the description given of the operation of the machine.

WILLIAM H. FITZHUGH,
JOHN R. DALL,
THOMAS EMORY, Eastern Shore, Md.
WILLIAM HOLLYDAY,
TAOMAS E. TILGHMAN,
RICHARD T. HOLLYDAY,
FRISBY TILGHMAN, Jr.

For the Farmers' Cabinet.

Indian Corn.

There has, within a few years, appeared in this section of country, a species of Indian corn, (Zea mays,) with the history of which I would like to be better acquainted; and I will return thanks to any of your numerous readers who are able and willing to gratify my curiosity. It is commonly called the "Texian" or "forage" corn, and will be immediately identified when I mention, that besides the general husk which envelopes the whole ear, *each grain is embraced in a similar covering*. I have heard it asserted that it grows wild some where in the far west; and one gentleman with whom I recently conversed, assured me that it was the original Indian corn in its wild and native state! As to its having been seen growing wild, that might very well be, from the seed having been dropped by a passing bird; but the suggestion that it was the Mays in its wild and native state, I was not inclined to believe; nevertheless a fact in relation to it has been recently made known to me by two persons that is sufficiently curious to justify my troubling you on the subject. I have now before me a small ear of corn of the kind of which I am speaking, viz. the *Texian*, with the grains enveloped in a husk, and an ear of corn which I am assured was gathered from a stalk raised from a seed taken from the identical Texian ear, which has no husk on the grains. When this was shown to me a few weeks since, I had my doubts whether the ear without the husk on the grain had not been produced by the plant having grown

in the neighborhood of other corn; and these doubts were strengthened by the circumstance that the grains were of several varieties, viz. sacharine, yellow gourd seed, white gourd seed, &c. &c.; but since then the following certificate has been placed in my hands; and I must confess that, as at present advised, I do not know what to think of it.

P. A. Browne.

December 22, 1837.

—

"I do hereby certify that last spring I planted in my garden back of my house, No. 477 Sassafras street, Philadelphia, two grains of Indian corn of that variety which has a husk on each grain, commonly called Texian corn; there was no other corn planted in my garden, nor any in the neighborhood, that I know of. Two stalks grew, both had corn ears on them, but one only came to perfection. The ear that grew upon this one was about six inches long, and was well filled with grains, but had *no husk on the grains.* The shape of the grains resembled the Texian corn.

"M. McCloskey."

Note.—A gentleman from Pemberton, N. J., left with the editor of the Cabinet, some few weeks since, two ears of corn plucked from the same stalk, the grains of one enveloped in a separate husk; the other ear having the appearance of the common flint corn, except the shape of the grain, which resembled the Texian corn.

For the Farmers' Cabinet.

Horticultural Society.

The Monthly Meeting of the Pennsylvania Horticultural Society was held on Tuesday, the 19th December, in the room under the Atheneum.

The premium for the best display of interesting plants was given to Isaac Buchanan, who exhibited Azalia Indica alba, Justicia Speciosa, Rosa Smithii, Plumbago Capensis Capsicum bachatum, Eupherbia Poinsettii, Daphne Indica, Astrapae Wallichii, Camellia imbricata, Althæ flora, &c.

The premium for the best display of fruit was given to Hugh Hatch, N. J.

The premium for the best display of vegetables was awarded to William Chalmers, senr.

Robert Kilvington, Turner's lane, exhibited some fine specimens of Sea Kale and blanched Dandelions.

Benjamin M. Hollinshead exhibited a very fine specimen of Valparaiso squash.

Alexander Parker exhibited olea fragrans, Daphne Indica, Ardisia Selanacea, A. Crenulata, Rochea folcata, Crassula imbricata, Tasilago farfara, Lachenalia tricela, Lauristinos, white and yellow Indian Chrysanthemums.

The display of plants and vegetables were limited at the meeting owing to the season of the year and the danger of bringing out fine exotics. The plants exhibited by Mr. Buchanan were healthy and very superior in appearance.

G. Watson, *Record. Sec'y.*

For the Farmers' Cabinet.

Borer in Apple Trees.

In looking over the New American Orchardist not long since, I come across the following, which I thought would apply to the case of your correspondent H., of Burlington, in the preservation of his favorite young apple tree. As he is desirous for any suggestions that might tend to the further resuscitation of his tree, I send it, thinking at least that it may be interesting to him, and, perhaps, not only tend to the renovation of the injured tree, but prevent any more from becoming victims to the same malady.

"*Section* XII. Noxious Insects, etc.—*Subs.* 2d. BORER.—The borer is a destructive worm which perforates the wood of the apple and quince at the surface of the earth or a little below, where the bark is tender. If the insects have once entered the tree, they may be dug out, or destroyed by introducing a sharp flexible wire, and the aperture must afterwards be filled with clay or mortar. The eggs which produce this insect are deposited from the last of April to the beginning of June. To prevent their attacks and secure the trees effectually, nothing more is necessary than to surround it, a little before the season when the eggs are deposited, either with a small conical mound of unleached ashes, or clay, or mortar, or with a wrapper of brown paper, as recommended for the peach. For small trees, a solution of two pounds of good pot ash in seven quarts of water, applied with a brush, from the height of a foot quite down to the surface, is a very cheap, easy, and effectual mode of preserving trees from their attacks, provided the application is made at the suitable season."

A.

Chester county, Dec. 9th, 1837.

For the Farmers' Cabinet.

In No. 10 of 2d vol., page 147, I have discovered an error of the engraver, in the figure accompanying the written specification, which is different from the original.

The original figure represented one side of the stove, and dotted lines showed the partition of the top, bottom, and two ends of the casing, and also represented the stove pipe as terminating upwards a short distance higher than the lower side of the arch of the fire-

place, so as to discharge the smoke into the chimney flue 2 a little above the sheet iron which surrounds the pipe immediately at the arch, to prevent the passage of heated air out of the apartment.

The error consists in changing part of the figure from a side view in a horizontal direction, to a diagonal one, showing one side, end, and top of the stove; but not making a corresponding change in the dotted lines, showing the upper parts of the two ends, and part of the upper edge of the farther side of the casing, which is not concealed by the horizontal portion of the stove pipe.

P.

23rd Dec., 1837.

Steam.

The chief value of boiling, or *steaming the food for animals*, seems to consist in rendering it more easy of digestion, and thus, perhaps enabling them to retain a greater portion of its nutriment than when it is used in a crude state. For old horses especially, whose teeth being worn, are incapable of effectually grinding the corn which their work may render necessary to their support, and whose powers of digestion are weakened by age, this is an incalculable advantage. Being softer than dry food, it is besides more readily consumed, and consequently allows more time for lying down and taking rest, a difference of more importance in its favor than may be generally imagined, for a horse takes from three to four hours to masticate 14 lbs. of hay, but a mash of potatoes of double that weight may be eaten in forty minutes. But for young and working cattle, in the full enjoyment of their health and strength, it may admit of doubt whether the constant use of such soft food may not weaken the powers of digestion, and relax the tone of their muscular fibre; for it has been found, from very careful trials, that, when only a small quantity of roots is given, the health and condition of the animals are improved by giving them in a raw state, as, in that form, they have a kindly effect upon the bowels; and, besides promoting the digestion of grain and straw, which they do in a remarkable manner, they impart to the animal an additional degree of life and spirit. In cases, however, where they have formed the chief article of food, boiling or steaming has been found to possess a more fattening quality, for it has the effect of depriving vegetables of a part of their watery juices, leaving only the farinaceous and other solid portions: thus potatoes lose about an eighth of their weight by the evaporation of water, when they are steamed, and about one-sixth if kiln-dried or baked, in which state they are, from the chemical change which they have undergone, more nutritious than when raw. There is, however, very essential difference in the quality of nutritive matter obtained from various qualities of the potato; for although when dried, the fibrous, or solid, matter may be of equal weight, yet it has been shown by various experiments that the product of starch, which constitutes the most nutritious portion of their substance, varies from one-fifth to one-sevenh of their product.

The superiority of the method of fattening cattle with food thus prepared has been proved by many experiments; and it is even said, that some persons having, in pursuance of a suggestion of the Bath Agricultural Society, boiled the oats for their horses, and given them the water to drink, have ascertained that a bushel given in that manner will maintain a horse in better condition than two in the common way. So broad an assertion may well be received with hesitation: yet the experiment is worth a trial; and, if used with caution, and mixed with a certain quantity of dry food, there can be little doubt that steaming a portion of horse provender, whether mixed with roots or not, will be found an economical plan. Mr. Curwen recommends it to be given warm; and no one at all acquainted with stable management can be ignorant of the comfort of a warm mash to a horse after extraordinary fatigue; it also improves the appearance of the coat, and the seeming condition; but it is not natural to the animal; and, notwithstanding the experience of Mr. Curwen, it may yet be doubted whether, as a constant practice, it would not be too relaxing. At the utmost, the mere chill should be taken off.

The objections usually urged against steaming, are the expense, the trouble, and the difficulty of preparing the feeds for several teams. But an ordinary *steam-apparatus* may be put up for a mere trifle, and food enough for a dozen to twenty horses be got ready, with little difficulty, in a short space of time, and with a very moderate quantity of fuel. When the cattle are not sufficiently numerous to justify the erection of a steaming-shed, the copper commonly placed in the corner of every wash-house may be replaced by an iron boiler, and used for this purpose in the following manner.

In the top there are two holes, one for receiving a funnel to supply the boiler with water, and the other for admitting the neck of a leaden pipe, which conveys the vapour to the steamer; the funnel is furnished with a steam-tight plug, and the boiler should be kept about two-thirds full. Adjoining the boiler, a strongly rivetted box, of sufficient dimensions to contain the intended quantity of food, is placed upon a frame of equal

height with the top of the boiler. from which the steam-pipe passes into it a few inches above the bottom, and just under a rack of laths, made strong enough to support the food, which is to be placed upon it, and close enough to prevent its falling through the intervals. The front of the box opens by either sliding or falling doors, sufficiently large to allow the food being put in and taken out, and sufficiently tight to prevent the escape of the steam; and in the top there is a small but heavy trap-door, the weight of which keeps it down, unless the pressure of the steam be too great, in which case it is forced open, and allowing a portion of the steam to pass, thus acts as a safety-valve. The steam penetrates through the rack into the whole mass of materials in the box, and, when condensed, drains down again, as water, with the oozings of the vegetables, upon the bottom, from which it is conveyed away by a waste-pipe communicating with the boiler. In placing the food care should be taken to put the roots at the bottom, and those articles which lie closer—such as hay, straw, bran, or chaff,—at the top, so as to allow a free passage upwards for the steam. A large basket may be placed underneath the box, into which the food may be raked when ready; or a tub, with a cock at the bottom, to let off water, may be used both for that purpose, and for washing the roots previously to their being steamed. The interior of the box may be divided by sliding partitions, reaching as far down as the rack, for the convenience of separating the different kinds of foods, if that should be thought necessary: the steam-pipe may also be made to pass along its whole length, and being perforated with small holes, will thus distribute the vapour equally.

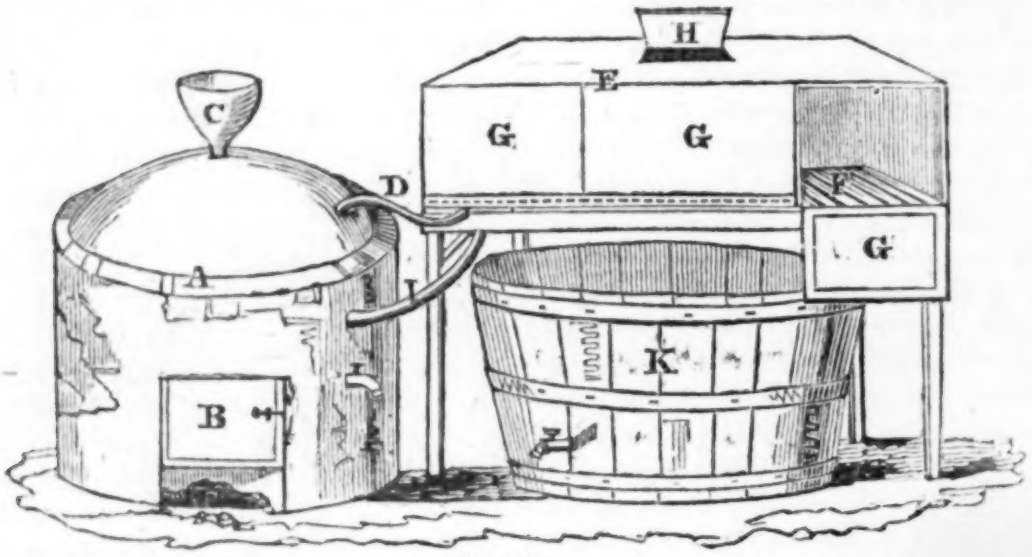

Fig. 30.

A, Boiler. B, Furnace. C, Funnel.
D, Steam-pipes. E, Steamer. F, Rack.
G, Doors. H, Trap. I, Waste-pipe.
K, Receiving-tub.

There is no occasion for the box being so large as to prepare all that may be required at one time, as a very large portion of different materials may all be steamed within an hour. The annexed figure will fully explain the plan of the machine, the whole cost of which would probably not exceed forty dollars.

For the Farmers' Cabinet.

On Ploughing.

There is no part of the practical operations of the Farmer that deserves more attention than ploughing. If his land is not thoroughly turned over, and that done with judgment, he sustains more loss than many have an idea of. Land can very often be drained or rendered moist, during a large part of the year by this means, and by preserving the soil of a uniform depth, the land will be rendered much more productive. In ploughing upland, care should be taken to keep the land as level as possible, and I have for several years past thrown back the clearing up furrows and then struck out sowing lands, in order to secure a uniform depth of soil. These furrows judiciously drawn I have found useful in draining my land. I have adopted this plan with my grain and grass, and have derived great advantage from it. The crop has been uniform. There were no bald streaks through my field indicating where the clearing up furrows were, the grain from which is usually imperfect and light, and the yield from which in general is very inferior to the rest of the land if it is rich. I have seen fine fields of grain and grass upon which there must have been a loss of one-eighth of the crop from this cause alone, as neither would grow upon the bald substratum. The soil being removed, there was nothing to sustain the plants. If the plan I recommend had been adopted, the crop would have been uniform, and there would have been no streaks to designate the lands. The depth of

ploughing should, in my opinion, depend upon that of the soil. The plough should at all times run from six to eight inches deep, and I have not been able to convince myself that there was any advantage obtained from going deeper. The plants that we usually cultivate, have heretofore yielded abundant crops under this system, and I cannot imagine any good reason why we should not be satisfied. If a farmer has more manure than his land will accommodate by the use of it after the commonly approved methods, deep ploughing and mixing the substratum of sand or clay with his manure and soil may not do any harm, but I take it to be an extravagant system, calculated to wear out horses and exhaust the patience and the purse, without any decided practical advantage. When we find that soil and manure generously put on and well mixed will yield heavy crops for three years, and good ones for two years more, I think we should be satisfied and not run the risk of breaking the beams of our ploughs, and the hearts of our men and our horses, to search for a soil which when found will be no better than that we already have. The productiveness of a crop very much depends upon the cultivation the land has previously had. If it has been carefully ploughed and grass or weeds should grow up with or get the start of the crop, they will always keep above it, and the desired crop must be proportionally inferior. In land in which artificial grasses are cultivated, the roots of the weeds and of the natural grasses should be destroyed by tillage before the seed is sown, otherwise they will prevail and the former cannot make a crop. Practical men will, I think, admit this to be of more importance than deep ploughing. PENN.

Agricultural Society of Butler County.

The regular meeting of the Agricultural Society of Butler county, Pennsylvania, was held in the Borough of Butler on the 12th December. The following named gentlemen were elected officers for the ensuing year. Hon. John Bredin, President—Johnson White, Esq., and Col. Wm. M'Junkin, Vice-Presidents—James Potts, Secretary—Hon. John Gillmore, Gen. R. McNair, J. McCurdy, Esq., Johnson Knight, Joseph Murrin, R. H. McKee, Isaac Pearson, S. R. Williams, C. Buhl, Esq., Henry Sefton, John Jack, John Dodds, J. McCandless, Esq., and Thomas Seaton, Directors. Committee appointed to award premiums at the next October exhibition—William Cunningham, John Welsh, Esq., John L. Maxwell, Robert Hayes, Gen. Robert McNair, John Dodds, Esq., and George Miller, Esq. The President, Judge Bredin, delivered the Annual Address, in accordance with a resolution adopted at a former meeting.

We hope that the example of the farmers of Butler county will be followed in every other county in the State. County Societies, properly organized, and efficiently sustained, must exert a salutary influence.

From the Genesee Farmer.

Successful Cultivation of Roots.

My business is to work, and not to write for the press, but as you ask communications from the farmer, I will in my plain way state what I have experienced in the cultivation of the Potatoe, Ruta Baga, and Mangel Wurtzel, Carrot, and Sugar Beet—manner of feeding, storing, &c., and the quantity of roots I raised this season.

POTATOE.

The Potatoe with me for ten years, the last excepted, has been a fair crop, but by adhering to the old method of tillage, has been more expensive than is necessary, as I find by the course I have adopted this season. I planted three acres the 29th and 30th of May; first ploughed, then manured with coarse barn-yard manure; then ploughed again and harrowed. Struck out the rows three feet apart with a one horse plough, say five inches deep; dropping the seed eighteen inches apart—turned back the furrow, and the work was done. For hoeing first and second time, the cultivator, so gaged as to fill the whole space between the rows, was passed through, followed by the hoe, giving a slight dressing, but making little or no hill, and the whole labor, after the ground was fitted, did not exceed three and a half days' work per acre. By the use of the plough the seed was planted deep; the potatoe never takes a downward direction. The cultivator loosened and mellowed the earth so as to allow the roots to extend, and to occupy nearly the whole row. *Get an expanding and contracting cultivator. Get one! get one!!* The product was over 430 bushels per acre, 1300 bushels from the three acres.

THE RUTA BAGA,

I had cultivated to a considerable extent for three years with success. This year I planted three acres in drills, twenty-one inches apart, 26th and 27th June. So soon as up, I sifted house ashes and plaster, mixed in equal quantities, at the rate of fifteen bushels per acre, with wire sieves, row by row, over the whole. The effect more than answered my expectations: that little pest, the turnep bug or fly, or its ravages, was not seen at all, and the growth was most vigorous. One acre of the piece had been planted with carrots, only about one-fourth of which

was standing, by reason of the insect, bad seed, or both, and ruta baga was planted in all the vacant places in the rows. They were thinned out, and hoed twice; they soon covered the ground, and the work was done. The product is over 1000 bushels per acre—3000 bushels the whole, notwithstanding one acre was partially seeded with carrots, and produced 200 bushels. About one acre of the land is fine sandy loam, and the remainder is slate washed from a ravine, all highly manured. The ruta baga I think draws more from the atmosphere, and less from the soil, than any other vegetable; for I have always found it retained the dew longer, and held it in greater quantities, than any thing else. It leaves the ground in finer condition than any other crop, and cannot be too highly valued. The carrot is excellent for fattening cattle, milch cows, &c., but is not so sure a crop, and requires much more labor in tillage. It does not always come up well, and is very liable to be destroyed by the insect.

THE MANGEL WURTZEL.

Of this root I planted one and a half acre on the 29th and 30th of May, (too late by ten days,) in drills twenty-one inches apart. Thinned once and hoed twice—tillage same as the ruta baga, (ashes and plaster omitted.) About two-thirds of the piece was planted with seed which proved to be a mixed kind of all the beet family; the other one-third part was the pure seed. The crop was fine, and if all had been of the same kind, the product I think would have been one-fourth larger. But as it was, the yield may be considered a fair one—over 800 bushels per acre, and the whole 1250 bushels. See the importance of having genuine seed, for I have no doubt the product was 200 bushels less than it would have been had all the seed been pure mangel wurtzel. I am much in favor of this root for feeding—probably is equal to any, except the sugar beet.

THE SUGAR BEET.

Of this I had only seed to plant six rods of ground. It seems to be well adapted to our soil and climate. The growth was much greater than any thing I have seen of the beet kind. I have no doubt it will prove most valuable for feeding cattle, as well as for sugar. The product was over 80 bushels, and at the rate of about 2100 bushels per acre, or 63 tons. I rate all by weight, 60 lbs. to the bushel, for otherwise most of the roots could not be measured with any degree of accuracy. Here follows a statement of the produce of seven and a half and six-one hundred and sixtieth acres of what may be considered first rate corn land, and in a high state of cultivation.

	Whole product.	*Per acre.*
3 acres potatoes,	1300	433½
3 do. ruta baga,	3000	1000
Carrots,	200	800
1½ do mangel wurtzel,	1250	800
6-160th sugar beets,	80	2100
7½ acres 6 rods.	5830 bushels.	

Five thousand eight hundred and thirty bushels, at 60 lbs. per bushel, give 346,800 pounds, or 176 1-5 tons. The potatoes 13 tons, ruta baga 30 tons, carrots 24 tons, mangel wurtzel 24 tons, and the sugar beet at the rate of about 63 tons per acre. This crop last year would have brought more than $2,300. What the price may be this year I know not. It is not my purpose to sell any, but to feed all to my cattle; so I have my own market, and trust I shall turn them to good account.

I am now feeding thirty-one head at the rate of one bushel each per day, with hay nights and mornings, in their stalls, with corn and other coarse fodder through the day. I shall add to their allowance as shall seem proper, and change from one to the other now and then. All the cattle eat greedily, and are doing well.

Barn Cellars, Storage of Roots, and Manner of feeding.

I have two barn cellars under the barn floors, which together hold 3000 bushels. They have each a small door at the back end, and scuttels through the floor—are well pointed and proof against frost. By opening the door and scuttels I can dispel the foul air or gas at pleasure, for large quantities of roots stored in cellars must be ventilated, or they will heat and spoil. These cellars are filled by drawing the loaded cart on the floor, and dumping the load through the scuttels; and the cellar is filled with very little labor.

The remainder of the crop were pulled and buried directly on the ground, much as potatoes, in heaps of about thirty-three bushels, leaving a small passage at the top, in order that the gas may pass off, without which they will not keep. In these two barns I stable thirty-eight head of cattle, thirty-one of which are beef cattle, one pair of working oxen, and five milch cows—all convenient to feed from the cellars. The roots are thrown upon the barn floor—cut with large English hay knives, which can be done by a smart man at the rate of a bushel per minute, and are passed to the manger with a scoop shovel. I have heard of cutting machines for root's—never saw one, nor do I wish to. A good pair of hands, knife, and willing mind, is all the cutting machine I want. Every farmer should have a barn cellar; the cost is but little, and the advantage

great. No one can know their value until he has one.

With good cattle, well constructed, clean well littered stables, plenty of roots, and good hay, with card and curry-comb applied every day, I can have fine cattle and good beef. Those roots should be extensively cultivated. They are within the reach of every man who farms any land, even one acre, and can be guaged to his wants. The poor man with his one acre and one cow, can at least plant six rods, and till it when be will do nothing else. See my eighty bushels of sugar beet from like quantity.

Let all raise according to his wants and means of feeding, depending on his own market, and omit raising a portion of other produce which costs him five times as much in both labor and land. This fact I have made plain in the exhibit of the entire product of two acres of ruta baga, buried directly on the ground as I pulled them, in heaps of say thirty-three bushels, weight one ton, standing as thick as cocks of hay in common meadows of one hundred each. Twenty to one! To see is to be convinced.

The point to gain is to be able to take the greater produce with least labor from the land, and to return the whole or an equivalent back again. Keep cattle, raise roots, &c., make manure and one important point is gained; for with manure I can raise roots, and with roots fed to cattle I can make manure and can pay back to the land as much as I received from it. I intend in due time to communicate the result of the feeding process this winter, and offer you something on other subjects, provided this effort in your opinion is worth the use of ink and types. Do with it as you please, and I am content.

I am, sir, respectfully, your ob't serv't.

JNO. SANFORD.

Marcellus, N. Y., Dec. 12, 1837.

Indian Wheat.

This is a new article and is a species of buckwheat. It has lately produced abundantly, up to a hundred and even a hundred and twenty bushels to an acre! The grain is valuable for stock yards, especially swine, and buckwheat cakes are celebrated throughout the land. Such an article in addition to our present stock, would be very valuable to the farmer, and would go to multiply his resources in unfavorable years. Samples of the grain, and small parcels for seed can be obtained on application to Mr. Colman, the State Commissioner for an agricultural survey.—*Haverhill Gaz.*

Nobody ventures on the high sea of public life, without becoming sooner or later sea-sick.

Cows.

The following statement of the cost, expense, and the avails of a cow for 14 months, made by a gentleman of this city, who has been a practical farmer, and who is no bad cultivator, shows how profitable cows may be, with proper management. A farm of one hundred acres, by such calculation and management as stated below, supposing it kept only twelve cows, would afford an annual income of at least $1600.

Dr.—Cost of cow and calf,		$20 00
Paid for pasturage,		15 00
1 1-2 tons of hay at $15,		22 00
One ton of corn stalks,		6 00
30 bushels bran at 20c.		6 00
266 lbs. oil cake at 1c.		2 66
40 bush. turneps and potatoes at 20c.		8 00
8 bush. potatoes at 42c.		3 36
		$5 44
Cr.—By calf sold,		
10 qts. of milk per day, for 14 months, at 5c. per quart,		210 10
Cow sold for beef,		45 84
		$261 28
Nett profit,		$178 26

N. E. Farmer.

An Extraordinary Calf.

There is at present on a farm near Baltimore, a calf which was got by a full bred Durham bull, out of a three-fourths Durham and one fourth Devon cow, which, at six days old, weighed 142 lbs., at sixty-one days old, his weight was 332 1-2 lbs., and at three months old, he weighed 457 1-2 lbs. These respective weights were accurately ascertained in the Western hayscales, and prove incontestibly that the *cross* has by no means impaired or lessened the bulk of this fine animal; indeed we know it to be the opinion of one of the most intelligent breeders in this country, the Hon. CHARLES A. BARNITZ, that for all the purposes of the dairy, one-fourth Devon blood in a milch cow, is a great addition to the butteraceous qualities of a milch cow, it being his opinion that this proportion of admixture increases the *richness* of the milk without subtracting in the least from its *quantity*. This fact was most satisfactorily proved by his celebrated butter-cow, Flora, which when fresh in milk, gave 20 lbs. of butter per week. Flora was sold about two years since to Major Frederick Haines, of Marietta, Pa., who was recently offered $400 for her. She is 3-4ths Durham and 1-4th Devon, and is besides one of the most perfect models of a cow to be found either in this country or in England. Her present owner has a fine heifer calf out of her, which we hope may inherit all the good qualities of her

far-famed dam, for surely no one is better entitled than the Major to the possession of first rate animals, as no one has exerted more sagacity or zeal in their obtainment.

But to return to the calf in question: in addition to his immense weight, he is a perfect model of what the genuine Durham should be in all the points that give that noble race character and caste. If the reader should ask who is his breeder, we must answer, sub rosa, that he may be found in the person of "Mine Host" of the Fountain Inn. —*Farmer and Gardner.*

Agricultural Societies.

It is with no ordinary feelings of pleasure we perceive by our exchange papers, that the agricultural communities throughout the country, are becoming sensibly alive to the propriety, nay necessity, of establishing Agricultural Societies. This feeling augurs well for the interests of husbandry, and should be cherished by every one, however remotely he may be connected with the cultivation of the earth. Farmers and planters form, after all, the great interest upon which all others must mainly rely for individual as well as national welfare; they are indeed the bone, sinew, and muscle of the country; for however beneficially the labors of other departments of human life may be exerted, the *country* would cut but a sorry figure if the labors of the plough were suspended, or any sudden disaster were to blight the products of the earth. Such being the case, it behoves those engaged in a calling at once so dignified and important, to exert every means within their power, to fulfil the high obligations confided to them. In England prior to the creation of agricultural associations, the condition of agriculture was most lamentably defective, and the earth did not produce more than a moiety of its present yield. The reader is most sensibly impressed with this truth, in reading Mr. Arthur Young's tours, as well as in the writings of the lamented Sir John Sinclair. But we need not go out of our own country to find instances of the kind, as it will be admitted by all intelligent men, that notwithstanding the small number of such societies which now exist in America, their influence has been widely and fortunately felt. Show us the county in which such an institution is located, and is now in healthful action, and we will show you a section of country in which evidences of the improvement of the soil and of stock, increase of product and of profit abound. The very circumstance of meeting together to confer upon subjects connected with the culture of the earth—to consult upon objects and measures, in which each feels a common interest, tends to bind the whole together by ties of almost fraternal strength, to infuse into each a spirit of enterprise and emulation, which in the race for rivalry never fails to end in the achievement of private and public good. Such assemblages may be compared to meetings upon *neutral ground*, where discussions of the highest moment may be carried on with the utmost advantage to the parties to it; where instead of the introduction of antagonist principles, creating collisions, heart-burnings and dissentions, the communion of brethren upon matters of the profoundest import to all, serve to bind them closer together, and awaken none but the most friendly feelings. Here the opinions and intelligence of States or counties may be concentrated—here the practice of one district is laid open to the inhabitants of another, and here, however well versed a farmer or planter may be in the mysteries of his calling, he may learn something that will prove of advantage to him on his return home; for the wisdom of the world belongs not to any single individual, however gifted he may be.

These being our views, we would respectfully urge upon our agricultural readers throughout the country, in every county where there is not a society already formed, to go to work with a holy zeal, and rest not until they have succeeded in forming one.—*Farmer and Gardener.*

Shaker Barn.

The English agricultural journals are warmly praising a mode of curing hay by ventilating the stacks or mows, and thus preventing mould or must; it will be seen by the following extract from the same writer's papers, that ventilation is no new thing among the shakers.—*Gen. Farmer.*

"The great object of agricultural curiosity at Hancock, is their magnificent circular stone barn, two stories in height, and ninety-six feet in diameter. The great mow is in the centre, and is said to be capable of containing four hundred tons of hay. The door, or drive way, is on the outside of the circle, and the team goes round and comes out of the same door by which it enters. By all passing in the same direction, several teams can stand on the floor and be unloaded at the same time. In the centre of this mow a large mast or post is erected, reaching from the ground to the roof, which is crowned with a small cupola. Slats, or pieces of plank, are secured around this post, at a small distance from it, to prevent the hay from coming in contact with it, and the hay at the bottom being raised from the ground, a perfect ventilation is kept up, and the steam from the new hay is effectually carried off."

January.

Stock.—If cattle are fed with straw, it should be done with necessary attentions and limitations. The celebrated Arthur Young observed, that "the best farmers in Norfolk are generally agreed that cattle should eat no straw, unless it be cut into chaff mixed with hay; but, on the contrary, that they should be fed with something better, and have the straw thrown under them to be trodden into dung;" and I am much inclined to believe, that in most, if not in all cases, this maxim will prove a just one. See that your cows are of the best breed. Give them roots as well as hay, and they will give you more than an equivalent in milk for their extra keep. Provide pure water for your milch cows, and not oblige them to go a mile, more or less, after it, manuring the highway, and running the gauntlet of dogs, teams, the horse and his rider, the sleigh and its driver, with more annoyances than Buonaparte met with in his retreat from Moscow. See also that the master-beasts do not tyrannise over their weaker brethren, and if any are inclined to domineer, take them into close custody, and deprive them of the liberty of the yard, till they will give indemnity for the past, and security for the future. Cut or chaff your hay, straw, corn-tops, bottoms, &c., with a straw cutter. If you give your cows good hay, roots, and comfortable lodging, you may make as good butter in winter as in summer, and become rich by sending to market the product of your dairy.

December.

In this chilly and inclement season of the year, when winter comes brushing down upon us; when man and beast are shivering in the wind, and each passer-by is heard to cry, "O, bless my heart how cold it is!" The farmer of economy and forethought is, no doubt, prepared to make the best of it. It is fit and proper that all our buildings be tight and snug as a lady's china closet. A farmer may have ventilation sufficient for his cattle and his fodder, without practising that slovenly habit we see in some, who would,) forsooth, be reckoned as patterns of good husbandry. Loose boards and shingles, broken hinges and swinging doors upon our barns, do not indicate any thing very favorable of the occupant. Tools scattered here and there, window glass broken, and cattle astray, are unpleasant sights to one that prides himself upon good husbandry. *Argus* was said to have had an hundred eyes, and only two of them were asleep at one and the same time. What an excellent farmer he might have been, to keep ever on the look-out, and see that every thing was as it should be! But every farmer can be Argus enough to see to his own affairs, if he will only bestir himself. *Attention!* Let not this word be a military technical altogether. It stands at the head of the husbandman's vocabulary, and its important signification is well understood to every diligent, active and persevering agriculturist.—*N. E. Farmer.*

Notices.

To Subscribers.—As many of our patrons commenced taking the Cabinet with the second half volume, (No. 13, Vol. 1.) the period for which they have subscribed will, of course expire with the next number. Those who wish to renew their subscriptions are requested to give us early information. Subscribers who live remote from the city are requested to pay the amount of subscription for the ensuing year to any post-master willing to receive it, as all post-masters are hereby authorized and most respectfully requested to act as agents for the Cabinet.

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Several communications on hand will receive early attention.

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Spring Wheat.

The Italian Spring Wheat may be obtained of Henry B. Hirst, No. 21 Arcade, west avenue, in quantities to suit purchasers, warranted genuine and of this seasons growth.

There is no rule in the world to be made for writing letters, but that of being as near what you speak face to face as you can.—*Steele.*

A man of wit, who is naturally proud, abates nothing of his pride or stiffness for being poor; and on the contrary, if any thing will soften him, and render him more pliant and sociable it is a little prosperity.—*Bruyere.*

ARTICLES.	Philadelphia, Jan. 1.	Baltimore. Dec. 28.	New York, Jan. 1.	Boston, Dec. 28.
Beans, white, per bush.	$1 28–1 62½	1 25—0 00	0 14—0 15	1 12—1 25
Beef, mess, new, per bbl.	14 00–15 00	11 00–13 00	14 00–15 00	14 50–15 00
Bacon, western, per lb.	8— 10	7— 9	8— 10	.....
Butter, extra, per tub	12— 14	16— 20	21— 23	20— 23
Butter, fresh, per lb. (market,)	00— 00	20— 25	20— 25	25— 28
Hams, per lb.	12— 14	10— 13½	10— 12	14— 15
Hog's Lard, per lb.	9½— 10	9— 10	10— 11	9— 10
Cheese, American, per lb.	9 — 10½	9— 11	8— 9½	8— 9
Beeswax, yellow, per lb.	25— 26	23— 25	26— 27	26— 31
Beeswax, white,	.....	38— 40	38— 40	38— 40
Bristles, American,	42— 65	25— 65	25— 65	.....
Flax, American,	7½— 8	9— 10	6— 7	9— 12
Flour, best, per bbl.	8 75—9 25	9 00—9 25	8 75—9 00	9 50—9 62
GRAIN—Wheat, per bush. Penna.	1 85—1 95	0 00—2 10	1 85—2 00	.....
do. Maryland,	1 60—1 75	1 80—2 00	1 60—1 75	.....
Rye, per bushel,	1 05—1 08	0 90—0 00	—1 18	1 33—1 37
Corn, do.	75— 76	75— 78	1 10—1 12½	1 02—1 07
Oats, do.	40— 43	37— 38	40— 50	52— 56
Barley, do. Penn.	85— 90	... .	0 00—	0 00—0 00
Peas do.	1 00—1 25	75—1 00	— 8	.....
HAY, Timothy, per 100 lbs.	0 80—0 85	12 00 pr. ton.	.....	18 00 pr ton.
Meadow Grass,	70— 80	.....	.....	.....
Hemp, American dry rot, ton,	150 —160	6— 7	130 —140	.....
Hops, first sort, 1836, lb.	9— 10	— 9	6— 6½	6— 7
Plaster Paris, per ton,	3 25—3 37½	0 00—3 50	2 50—	3 00—3 25
SEEDS—Cloverseed, per bushel,	5 00—6 50	5 50—6 00	.....	14— 15
Flaxseed, rough, do.	1 40—1 43	1 37—1 50	8 50—9 50	.....
Timothy,	2 00—0 00	3 25—4 00	12 50–14 00	2 87—3 00
Tallow, per lb.	11— 11½	— 11	— 11	11— 12
WOOL—Saxony, fleece, per lb.	00— 00	40— 50	50— 00	50— 55
Merino,	46— 48	35— 40	37— 00	45— 47
1-4 and common,	33— 36	25— 30	40— 50	33— 38

Prices of Marketing as near the average as can well be ascertained.

Beef, - -	7½ a 8 by the quarter.	Potatoes, - -	- 40 a 50 per bu.
Pork, country killed,	- - 6 a 8	Sweet Potatoes, -	75 a 1 00 per bu.
Veal, - -	6 a 8 cents per lb.	Apples, - -	75 do.
Mutton, - -	- - 6 a 8	Dried Apples, -	1 50 a 1 75 do.
Dried Beef -	12½ a 15 per lb.	Dried Peaches, -	- 4 00 do.
Turkeys, - -	$1 12½ a 1 25 apiece.	Cider, -- -	a 3 00 per barrel.
Chickens, - -	75 a 1 50 per pair.	Lard, - -	- 14 a 16 per lb.
Geese, - -	1 00 a 1 25 a piece.	Hams, - -	- 16 do.
Ducks, - -	75 a 1 25 a pair.	Shoulders, -	- 12½ do.
Butter, - -	- 25 a 38 per lb.	Oak Wood, -	- 5 00 a 6 00
Eggs, - -	- a 20 per doz.	Hickory Wood, -	- 6 50 a 7 50

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